

U.S. Patent Application Serial No. 09/977,363
Amendment dated November 12, 2003
Reply to OA of August 11, 2003

IN THE CLAIMS

Please amend claim 14 as follows:

1-8. (Canceled).

9. (Previously Presented): A process for producing a rare earth metal-based permanent magnet, comprising the step of forming a metal oxide film containing carbon on the surface of a magnet by a sol-gel coating process using a sol solution into which a metal compound as the metal oxide film forming source is incorporated in an amount of from 0.1 wt% to 20 wt% in terms of the metal oxide.

10. (Original): A process for producing a rare earth metal-based permanent magnet according to claim 9, wherein said metal oxide film is formed from a metal oxide component including at least one selected from Al, Si, Ti and Zr oxides.

11-13. (Canceled).

14. (Currently Amended): A process for producing a ~~rate~~ rare earth metal-based permanent magnet, comprising the step of forming a metal oxide film containing carbon on the surface of a magnet by a sol-gel coating process using a sol solution into which a metal compound as the metal oxide film forming source is incorporated in an amount of from 0.1 wt% to 20 wt % in terms of the

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metal oxide, thereby forming, between said metal oxide film and the entire surface of said magnet, an interfacial layer with R (rare earth element) atom chemically bonded with a film forming metal atom through oxygen atom.

15. (Original): A process for producing a rare earth metal-based permanent magnet according to claim 14, wherein said metal oxide film is formed from a metal oxide component including at least one selected from Al, Si and Ti oxides.

16. (Previously Presented): A process for producing a rare earth metal-based permanent magnet according to claim 9, wherein the content of carbon is in a range of 50ppm to 1,000ppm.

17. (Previously Presented): A process for producing a rare earth metal-based permanent magnet according to claim 14, wherein the content of carbon is in a range of 50ppm to 1,000ppm.